

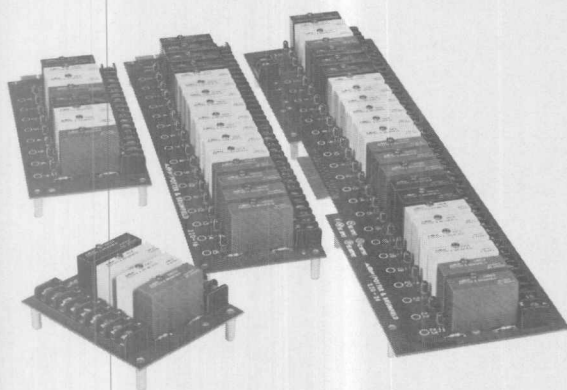
AMF

Potter & Brumfield

2IO/2IOQ Series

Input/Output Mounting Boards

POTTER & BRUMFIELD INPUT/OUTPUT MOUNTING BOARDS



2IO series

MOUNTING BOARDS FOR INPUT/OUTPUT MODULES

GENERAL INFORMATION

The 2IO series of mounting boards will accept as many as 4, 8, 16 or 24 input/output modules in any combination. Modules may be inserted and removed, quickly and easily, without disturbing field wiring. Once inserted, modules may be secured to the board by threading the captive hold-down screws into the nuts attached to the board.

An LED status indicator, plug-in 5 amp fuse, and 3.3K ohm pull-up resistor are provided on the mounting board for each module. Each module position may be color coded for convenience in maintaining and servicing the system.

Screw terminals in barrier strips are used for logic supply input connections and field input/output connections on all mounting boards. The four-position boards (2IO-4A, 2IO-4B & 2IO-4C) and three of the 16-position boards (2IO-16A, 2IO-16B & 2IO-16C) also have screw terminals in a barrier strip for connection to the logic system. Screw terminals on all mounting boards will accept two #12 AWG wires.

Mounting boards with 8, 16 and 24 positions (2IO-8, 2IO-16 & 2IO-24) have card edge patterns which accept standard 50-pin cable connectors for logic connections. Eight position mounting board (2IO-8) will also accept a 26-pin cable connector. Each module position on these boards is served by two of the cable's conductors. Odd-numbered pins are used for signals while even-numbered pins are connected to logic ground. Jumper locations permit logic supply input to be introduced through the cable, rather than the screw terminals.

FEATURES

- LED Status Indicators
- Plug-in Fuses
- Pull-up Resistors
- Card Edge Logic Connections (2IO-8, 2IO-16 & 2IO-24)
- Screw Terminal Logic Connections (2IO-4A, 2IO-4B, 2IO-4C, 2IO-16A, 2IO-16B & 2IO-16C)
- Screw Terminals for Field Wiring
-  File E61482
-  File LR15743

Mounting Board Comparison Chart

Interface Connector Types, Fuse Types and Agency Recognitions

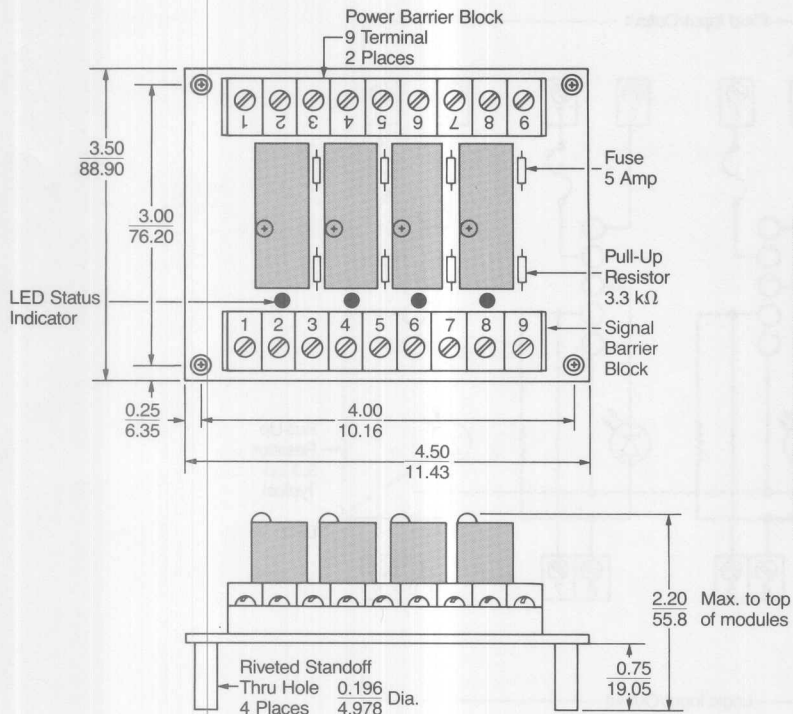
Part Number	2IO-4A	2IO-4B	2IO-4C	2IO-8	2IO-16	2IO-16A	2IO-16B	2IO-16C	2IO-24
Number of: I/O Channels	4	4	4	8	16	16	16	16	24
Module Positions	4	4	4	8	16	16	16	16	24
Notes	1 4 6 7 8	1 4 6 7 9	1 4 6 7 10	2 3 4 6 7 8	3 4 6 7 8	1 4 6 7 8	1 4 6 7 9	1 4 6 7 10	3 4 5 6 7 8
1	Barrier Terminal Strip								
2	*26-pin Card Edge Connector: T&B Ansley P/N 609-2615M 3M P/N 3462-0001								
3	*50-pin Card Edge Connector: T&B Ansley P/N 609-5015M Dale P/N EB43K255GW 3M P/N 3415-0001 (Wire Wrap or Solder Connector)								
4	5 Amp Fuse: Littlefuse P/N 275-005 & P/N 255005 Bussmann P/N GFA5								
5	1 Amp Fuse: Littlefuse P/N 275-001 & P/N 255001 Bussmann P/N GFA1								
6	UL Recognized/CSA Certified for 125V Max. with 5 amp fuses								
7	UL Recognized/CSA Certified for 250V Max. with #22 solid copper jumper wire instead of 5 amp fuses								
8	Designed to operate with negative true logic systems and one logic voltage								
9	Designed to operate with either negative or positive true logic systems and different logic voltages								
10	Designed to operate with negative true logic systems and different logic voltages								

*Logic interface connector contacts are spaced on 0.1" centers.

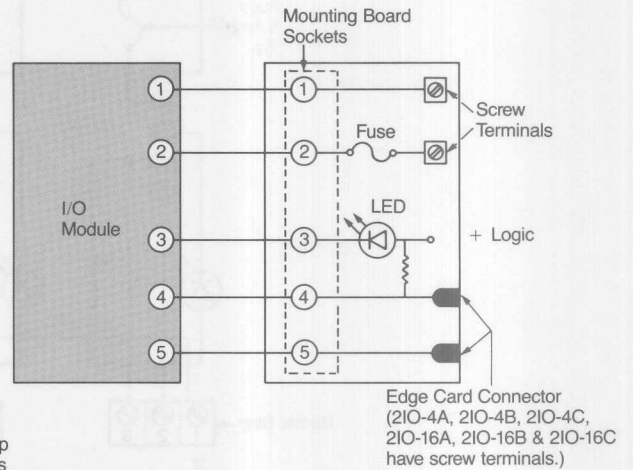
Note: See page 10 for 2IOQ series.

2IO-4A, -4B & -4C MOUNTING BOARDS

Outline Drawing

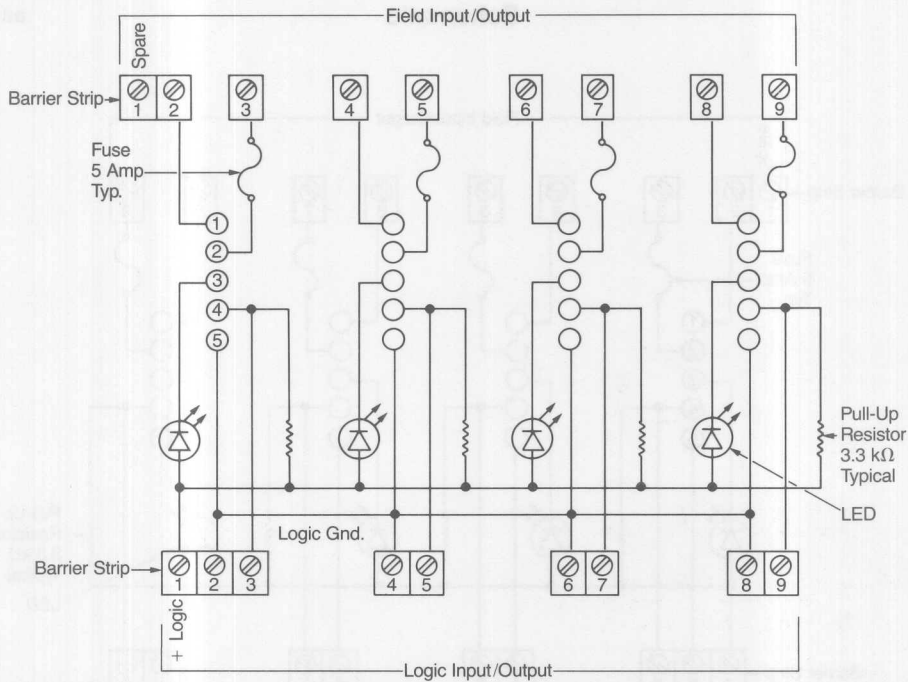


Mounting Board System



All dimensions are given as **inches**
mm

2IO-4A Schematic

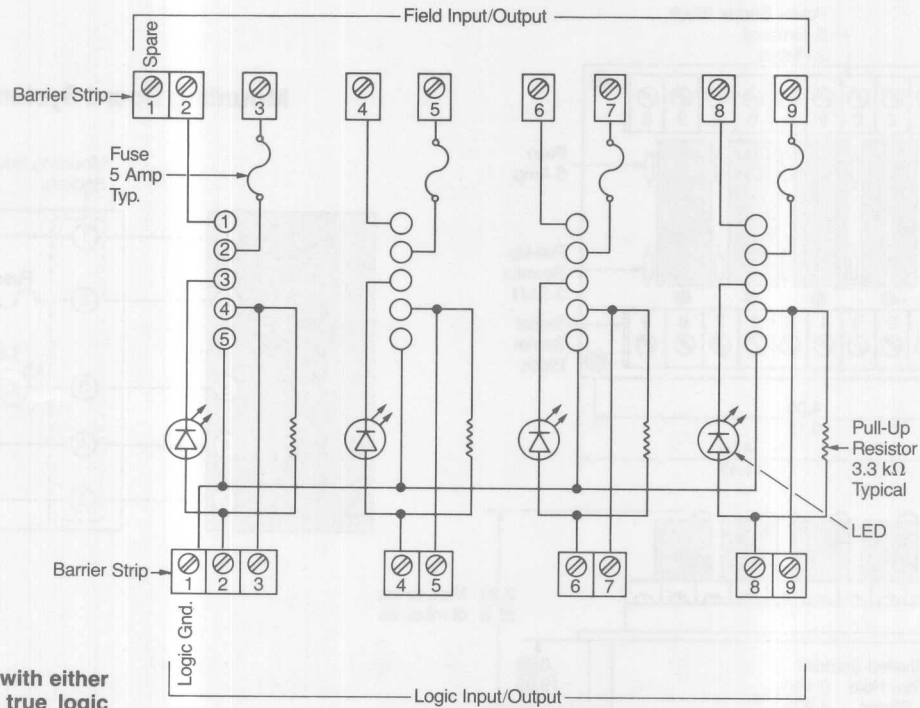


Designed to operate with negative true logic systems and one logic voltage.

2IO-4B

Schematic

NOTE: Outline drawing is same as for 2IO-4A

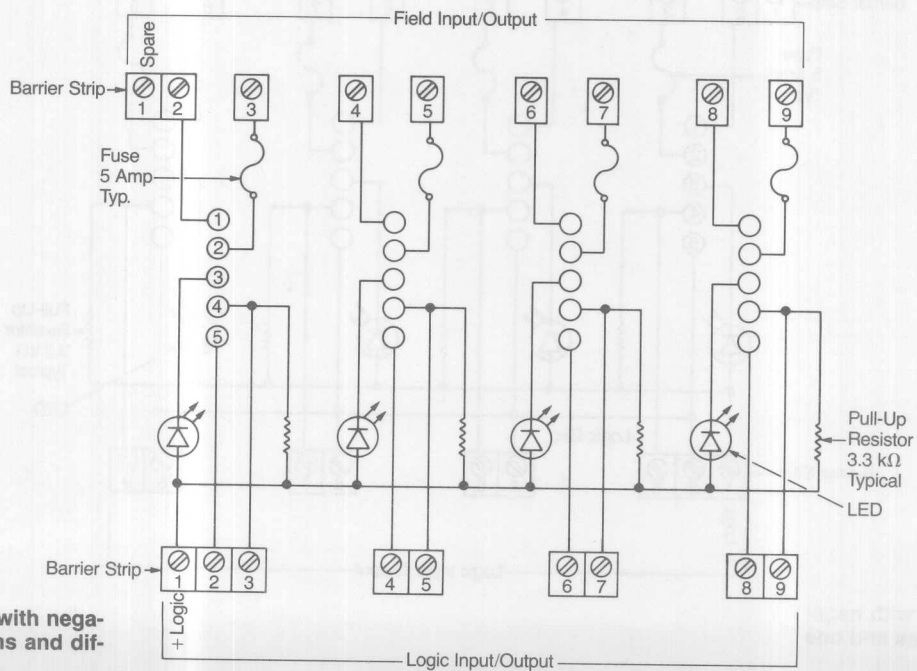


Designed to operate with either negative or positive true logic systems and different logic voltages.

2IO-4C

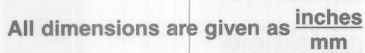
Schematic

NOTE: Outline drawing is same as for 2IO-4A



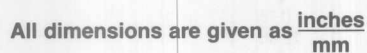
Designed to operate with negative true logic systems and different logic voltages.

Outline Drawing



5

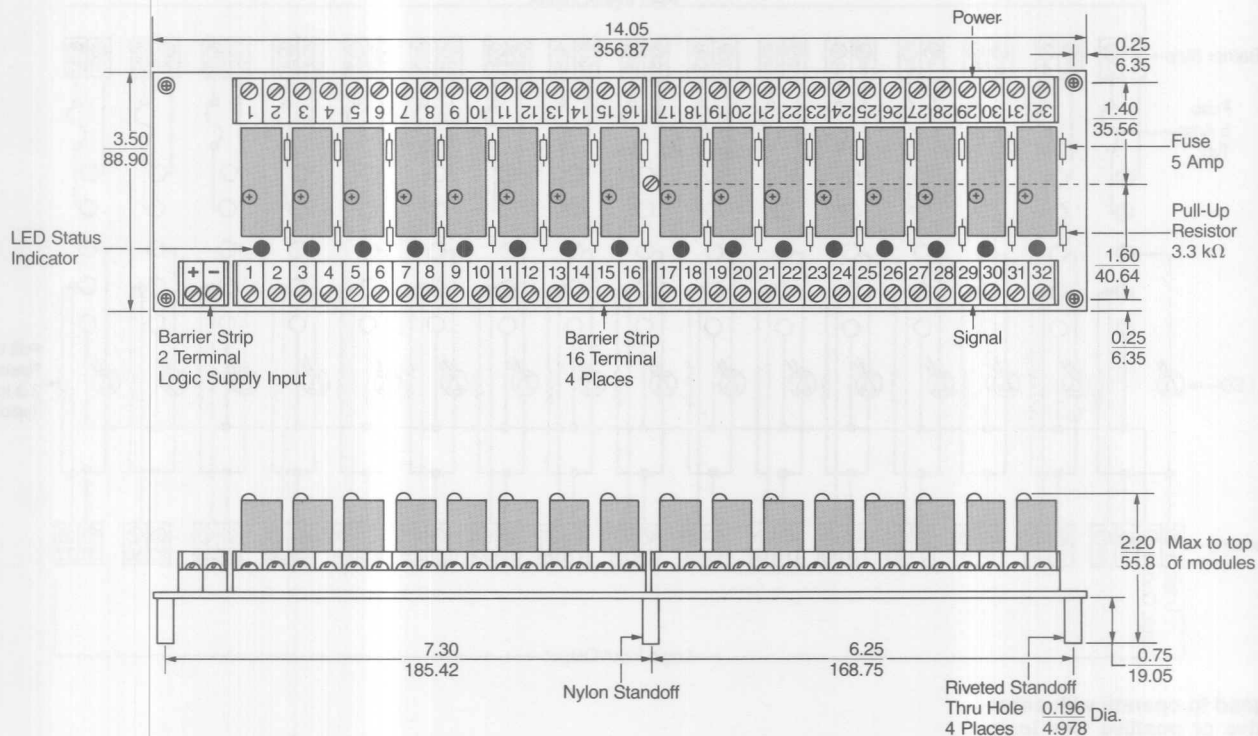
Outline Drawing



6

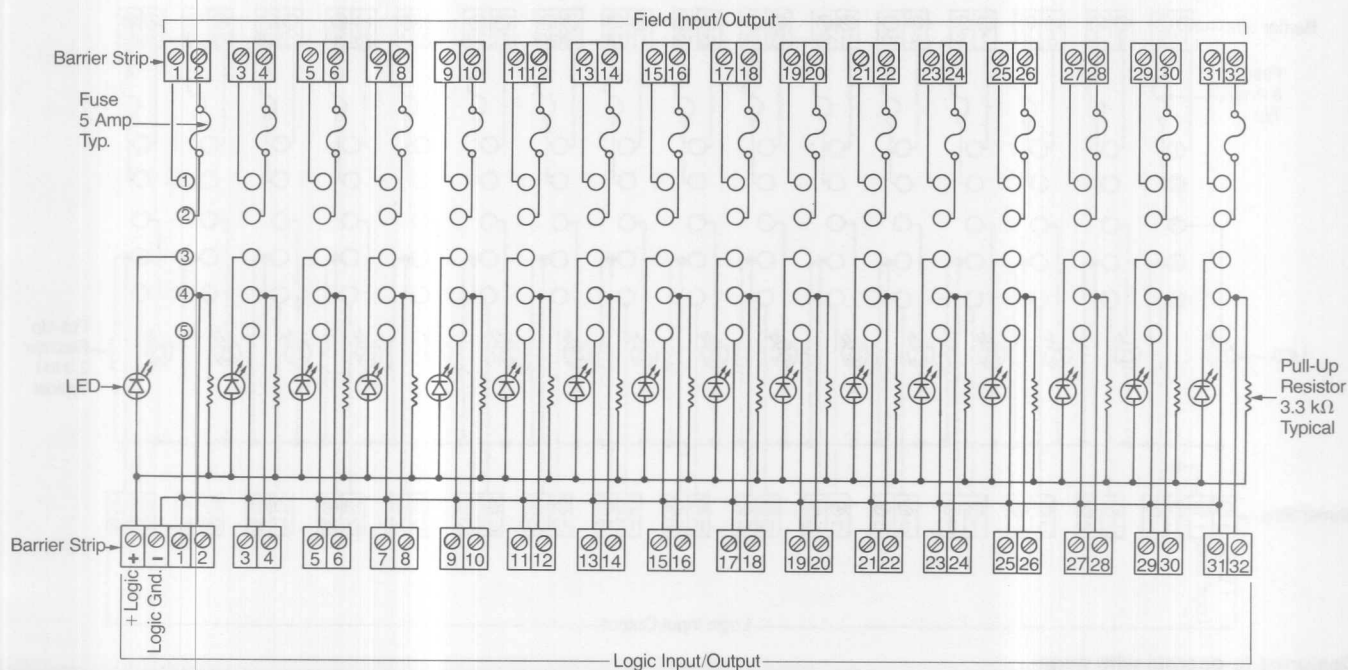
2IO-16A, -16B & -16C MOUNTING BOARDS

Outline Drawing



All dimensions are given as inches
mm

2IO-16A Schematic

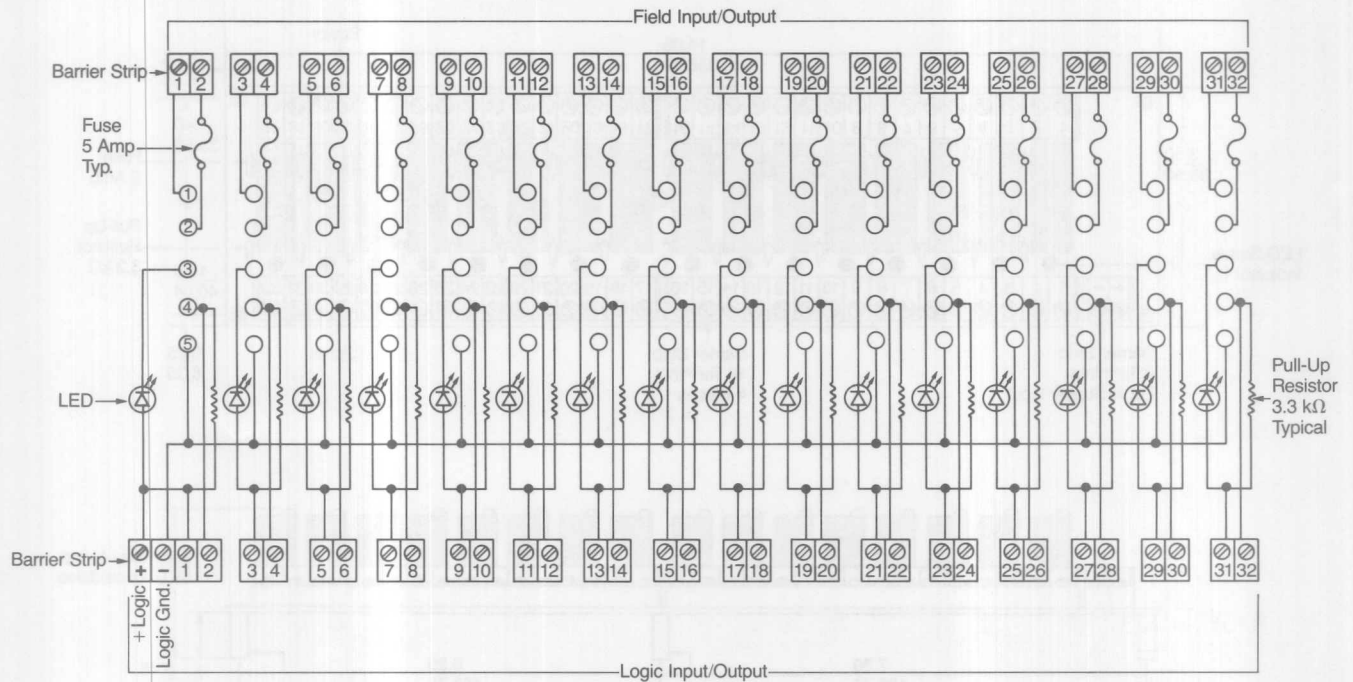


Designed to operate with negative true logic systems and one logic voltage.

2IO-16B

NOTE: Outline drawing is same as for 2IO-16A

Schematic

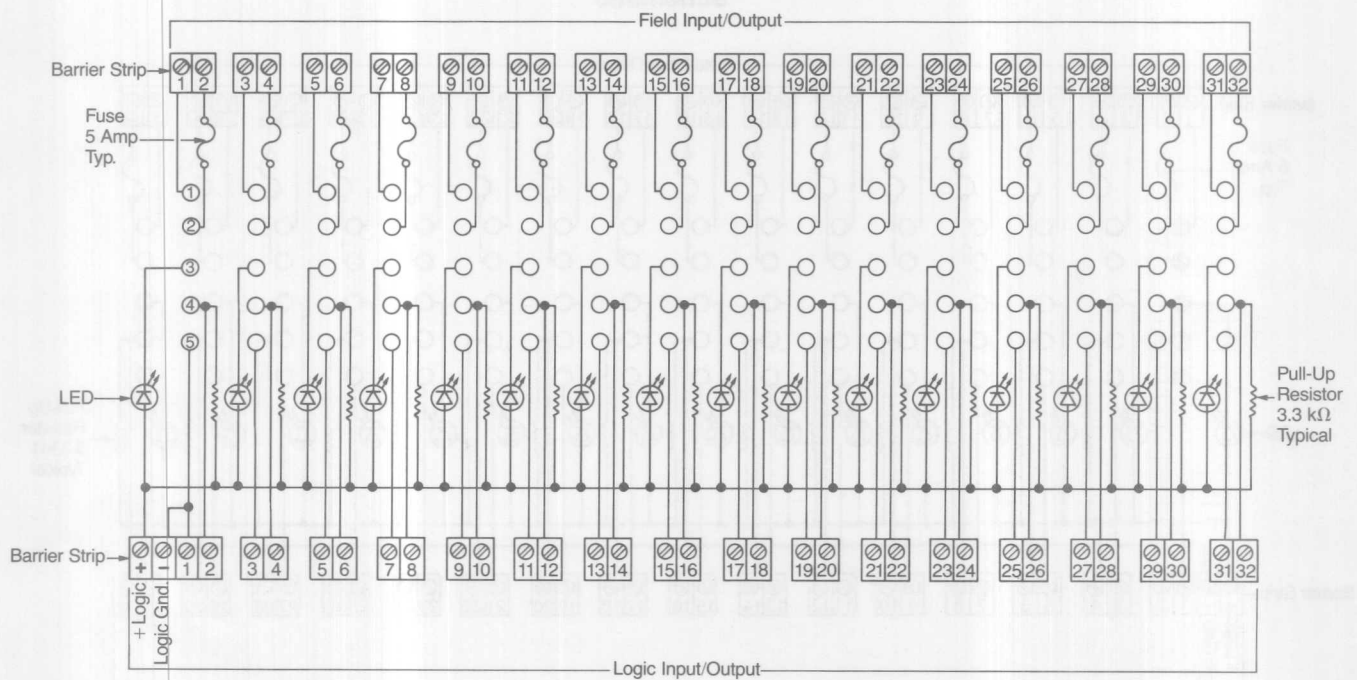


Designed to operate with either negative or positive true logic systems and different logic voltages.

2IO-16C

NOTE: Outline drawing is same as for 2IO-16A

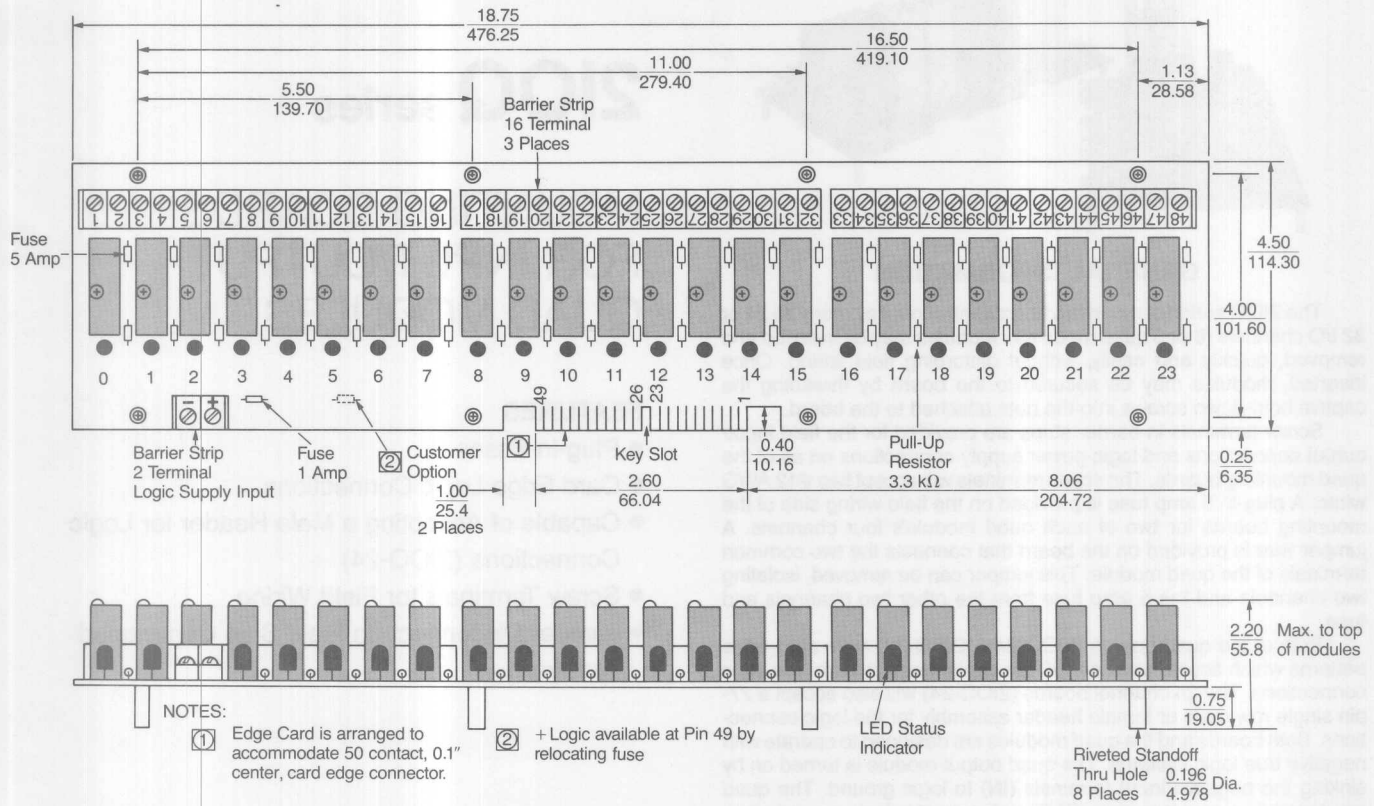
Schematic



Designed to operate with negative true logic systems and different logic voltages.

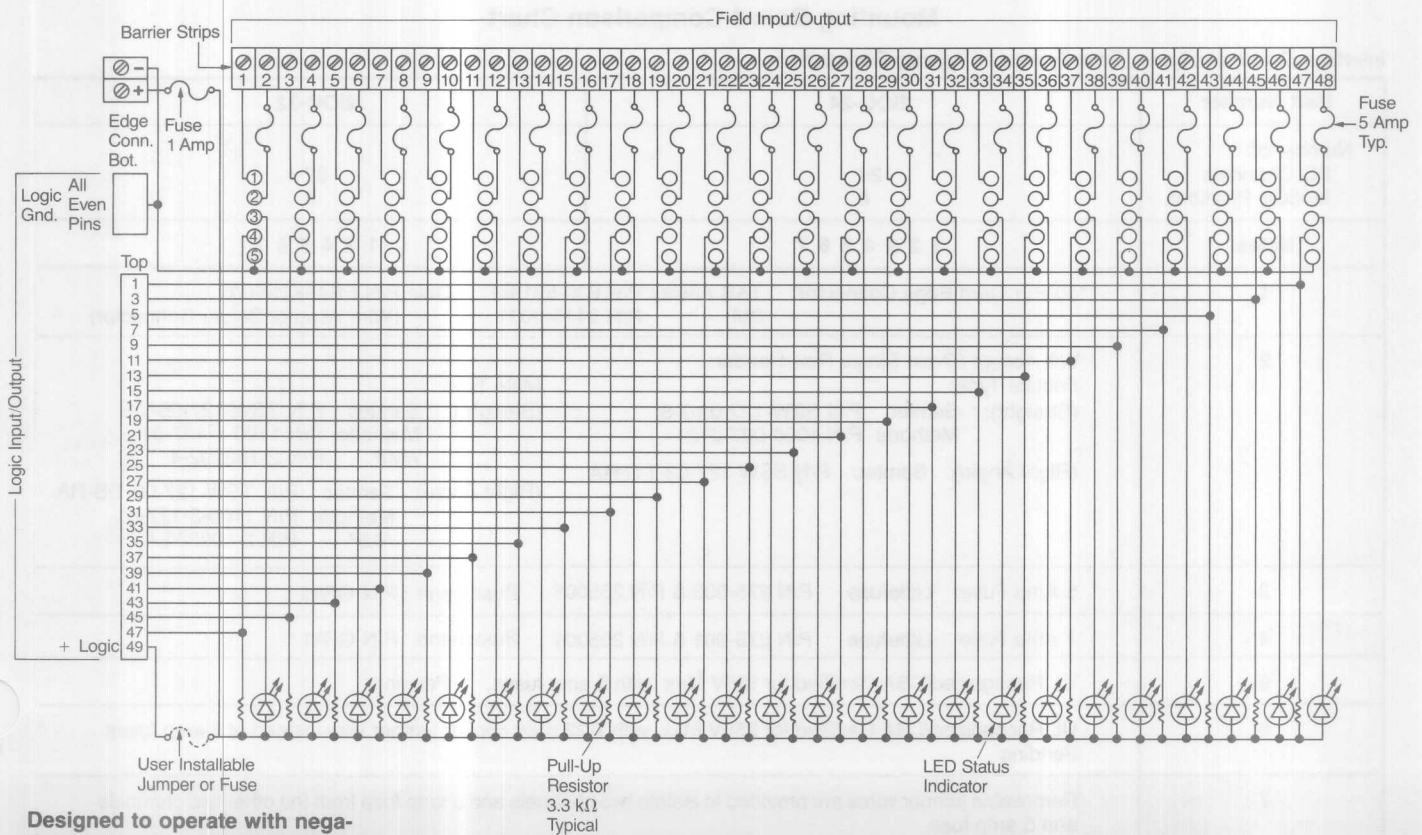
2IO-24 MOUNTING BOARD

Outline Drawing



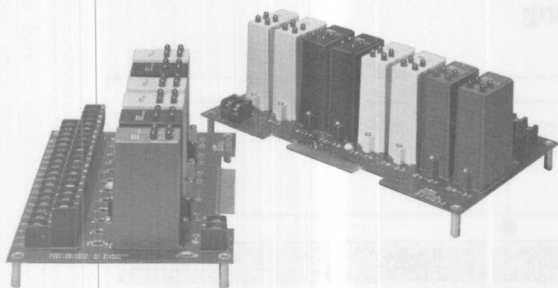
All dimensions are given as $\frac{\text{inches}}{\text{mm}}$

Schematic



Designed to operate with negative true logic systems and one logic voltage.

POTTER & BRUMFIELD INPUT/OUTPUT MOUNTING BOARDS



GENERAL INFORMATION

The 2IOQ series of mounting boards will accept as many as 24 or 32 I/O channels (6 or 8 quad modules). Modules may be inserted and removed, quickly and easily, without disturbing field wiring. Once inserted, modules may be secured to the board by threading the captive hold-down screws into the nuts attached to the board.

Screw terminals in barrier strips are provided for the field input/output connections and logic power supply connections on all of the quad mounting boards. The screw terminals will accept two #12 AWG wires. A plug-in 5 amp fuse is provided on the field wiring side of the mounting boards for two of each quad module's four channels. A jumper wire is provided on the board that connects the two common terminals of the quad module. This jumper can be removed, isolating two channels and the 5 amp fuse from the other two channels and fuse.

Both of the quad boards (2IOQ-24 & 2IOQ-32) have card edge patterns which accept standard 50-pin cable connectors for the logic connections. The 24 channel boards (2IOQ-24) will also accept a 27-pin single row male or female header assembly for the logic connections. Both boards and the quad modules are designed to operate with negative true logic systems. The quad output module is turned on by sinking the negative input terminals (IN) to logic ground. The quad input module output terminals (OUT) sink current to logic ground when proper input voltage is applied to input terminals. The quad boards are designed to accept quad input or output modules in any of the various positions as long as the modules are of the same logic voltage type.

2IOQ series

MOUNTING BOARDS FOR INPUT/OUTPUT QUAD MODULES

FEATURES

- Plug-in Fuses
- Card Edge Logic Connections
- Capable of Accepting a Male Header for Logic Connections (2IOQ-24)
- Screw Terminals for Field Wiring
- Jumper Disconnect on Field Side Commoned Terminals

Mounting Board Comparison Chart

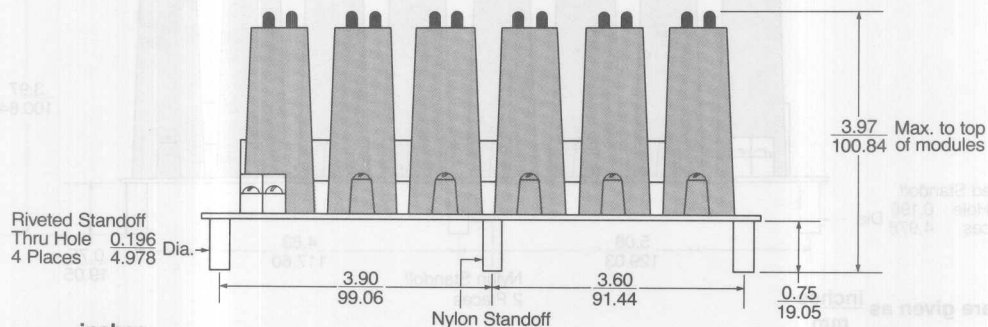
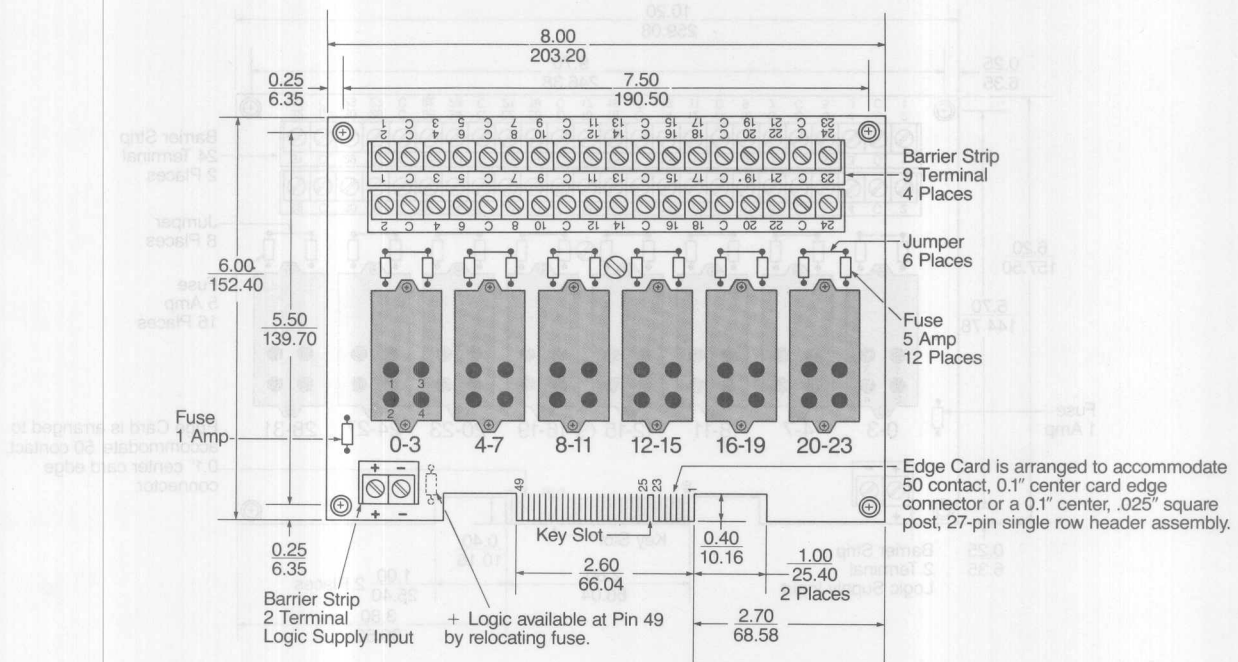
Interface Connector Types, Fuse Types and Agency Recognitions

Part Number	2IOQ-24	2IOQ-32
Number of: I/O Channels Module Positions	24 6	32 8
Notes	1 2 3 4 5 6 7	1 3 4 5 6 7
1	*50-Pin Card Edge Connector: T&B Ansley P/N 609-5015M Dale P/N EB43K255GW 3M P/N 3415-0001 (Wire Wrap or Solder Connector)	
2	*Will Accept 27-pin Single Row Header: Female Type: (Straight): Samtec P/N SSW-127-02-T-S Male Type: Methode P/N 1000-027-2101 (Straight): Samtec P/N TSW-127-08-T-S (Right Angle): Samtec P/N SSW-127-03-T-S-RA (Right Angle): Samtec P/N TSW-127-09-T-S-RA Methode P/N 1100-3-127-01 AMP P/N 2-102202-4 AMP P/N 2-102203-4	
3	5 Amp Fuse: Littlefuse P/N 275-005 & P/N 255005	Bussmann P/N GFA5
4	1 Amp Fuse: Littlefuse P/N 275-001 & P/N 255001	Bussmann P/N GFA1
5	UL Recognized/CSA Certified for 125V Max. with 5 amp fuses. Pending	
6	UL Recognized/CSA Certified for 250V Max. with #22 solid copper jumper wire instead of 5 amp fuses. Pending	
7	Removable jumper wires are provided to isolate two channels and 5 amp fuse from the other two channels and 5 amp fuse.	

*Logic interface connector contacts are spaced on 0.1" centers.

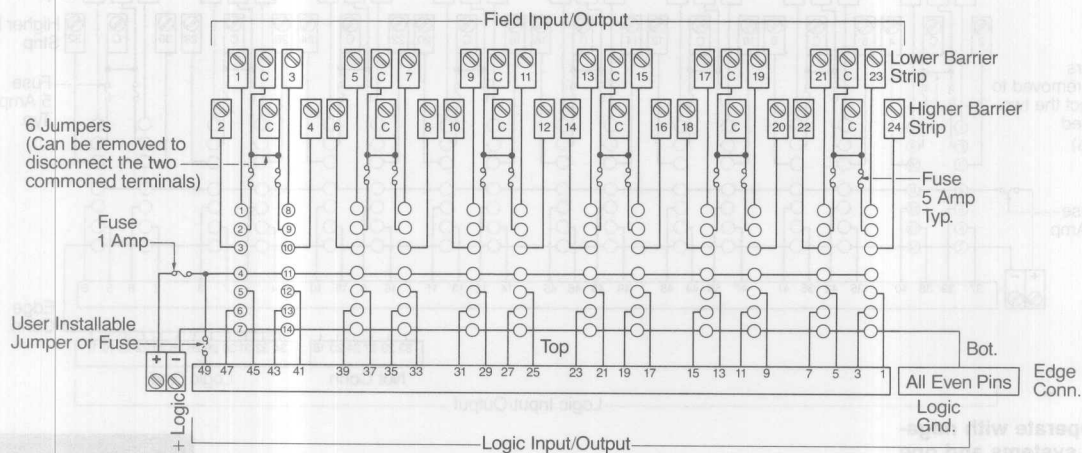
210Q-24 QUAD MOUNTING BOARD

Outline Drawing



All dimensions are given as $\frac{\text{inches}}{\text{mm}}$

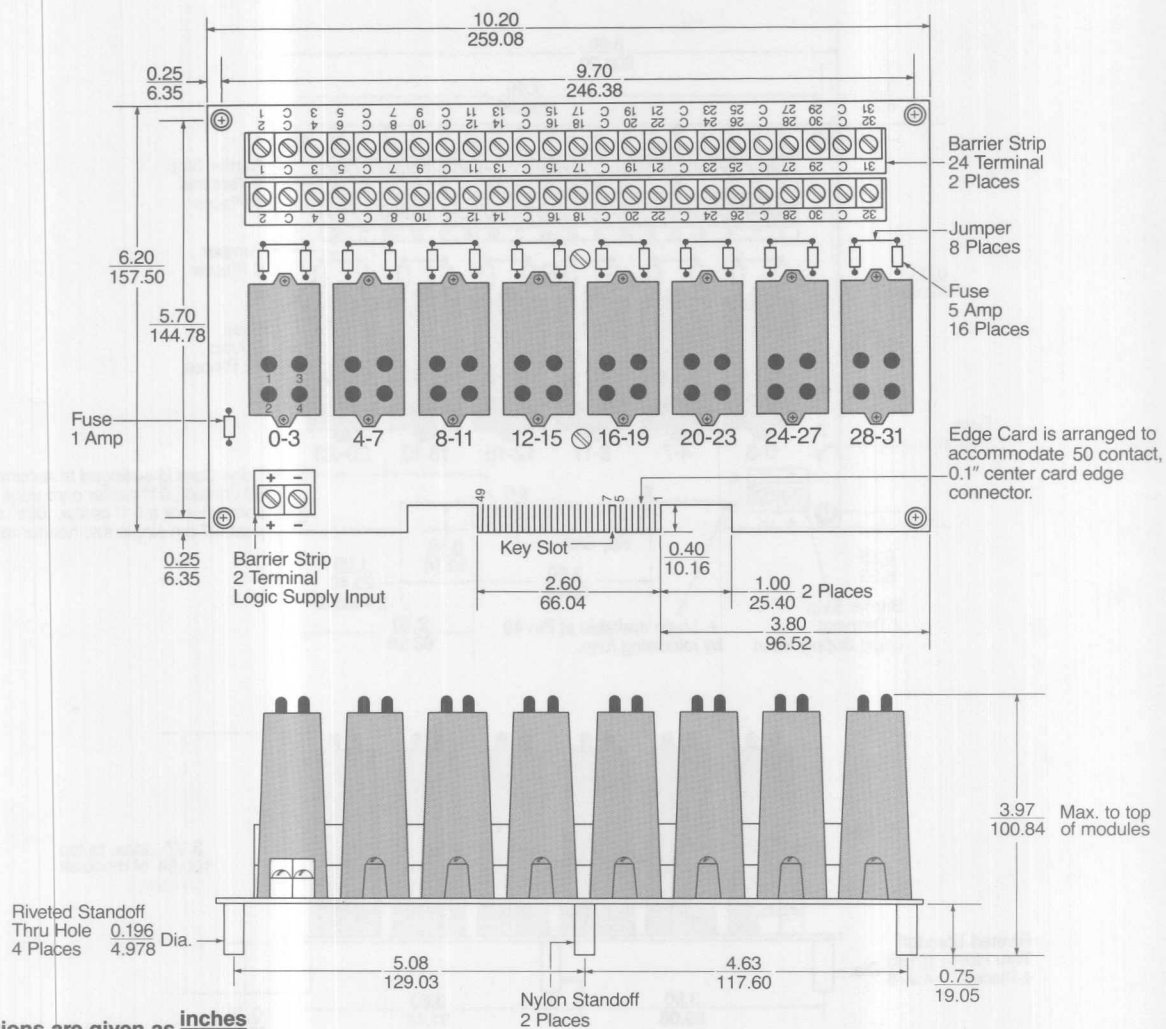
Schematic



Designed to operate with negative true logic systems and one logic voltage.

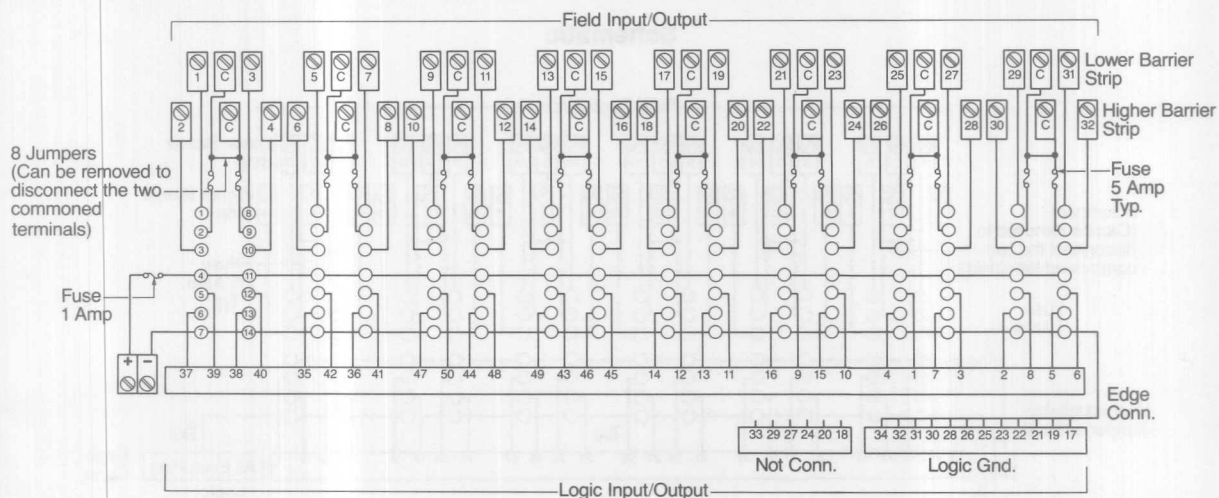
2IOQ-32 QUAD MOUNTING BOARD

Outline Drawing



All dimensions are given as **inches**
mm

Schematic



Designed to operate with negative true logic systems and one logic voltage.